

PROJECT DESCRIPTION

I. GENERAL

This project involves the reconstruction of the traffic controlsignals at the intersections of MD 210 and Livingston Rd. and MD 210 and Audrey Lane. Interconnect cable shall be installed overhead along MD 210 (Indian Head HWY.) north from Livingston Rd. to Audrey Lane in Prince George's County.

MD 210 (Indian Head Hwy.) is assumed to run in an north-south direction.

II. INTERSECTION OPERATION

A. MD 210 and Livingston Road.

1. The intersection operation shall remain in a six-phase, fully-traffic-actuated mode with exclusive left turns on MD 210. There is an exclusive/ permissive right turn from westbound Livingston Rd. that will operate with the MD 210 southbound left turn. The side roads shall operate together. Sampling stations shall be provided for the northbound and southbound approaches on MD 210. A pushbutton actuated pedestrian movement shall be provided for westbound Livingston Rd. to cross MD 210. Autoscope video cameras shall provide the presence detection.
2. An full-traffic-actuated, eight-phase controller with two (2) four- channel rack mounted amplifiers, detector rack power supply, autoscope processor and surge protector, opticom discriminator module and rack with all necessary equipment and harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at the intersection.

B. MD 210 and Audrey Lane.

1. The intersection operation shall remain in a six-phase, fully-traffic-actuated mode with exclusive left turns for MD 210. Audrey Ln. approaches shall operate in a split phase. Sampling stations shall be provided for both the northbound and southbound approaches on MD 210. A pushbutton actuated pedestrian movement shall be provided for both the approaches of Audrey Ln. to cross MD 210. A pedestrian movement shall operate with southbound approach of MD 210. Autoscope video cameras shall provide the presence detection.
2. A full-traffic-actuated, eight-phase local controller and a master ASC 10,000 controller with telemetry, two (2) four-channel rack mounted amplifiers, detector panel, and detector rack power supply, autoscope processor and surge protector, phone drop, all necessary equipment and their harnesses housed in a NEMA size "6" base-mounted cabinet shall be installed at this intersection.

III. SPECIAL NOTES:

1. Upon completion of this project, the Contractor shall notify Mr. Robert Snyder at (410) 787-7631 to arrange for the phone line installation. The Contractor is to provide Mr. Robert Snyder with the nearest street address, zip code and phone number.

CONTACT LIST

The following are the contact persons for District 3:

Mr. Charlie Watkins
District Engineer
301-513-7300

Mr. Majid Shakib
Asst. Dist. Engr.- Traffic
301-513-7358

Mr. Joe Geckie
Asst. Dist. Engr.- Utilities
301-513-7350

Mr. Randy Brown
Asst. Dist. Engr.- Maintenance
301-513-7304

S.H.A. Offic of Traffic and Safety:

Mr. Richard L. Daff
Chief, Traffic Operations Division
410 787-7630

Power Company Representative:

Ms. Elizabeth Hewingway
Potomac Electric Power Company
4061 Powder Mill Road
Calverton, Maryland 20705
301-931-2880

EQUIPMENT LISTS

A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
9002	4 EA.	Four-channel-rack mounted amplifiers.
9004	2 EA.	Detector rack power supply.
9008	1 EA.	Opticom Eye.
9009	1 EA.	Opticom discrimination module (562).
9086	2 EA.	Cabinet w/telemetry (system cab) size 6 base mounted cabinet.
9087	2 EA.	Controller ASC II with telemetry.
9088	1 EA.	Controller, master ASC 10,000 w/ telemetry.
NEG.	8 EA.	Autoscope Zoom Camera.
NEG.	2 EA.	Autoscope processor.
NEG.	2 EA.	Surge protector.
NEG.	2 EA.	Camera pole mounting bracket.
NEG.	3 EA.	Camera 'L' mounting bracket.
NEG.	7 EA.	Junction box for a two camera installation.
NEG.	3 EA.	6' adjustable astro bracket.
9089	312 S.F.	Flat sheet aluminum sign (white) consisting of :
	4 EA. R3-5 (L)	"LEFT TURN ONLY", (30" x 36") most arm mounted signs with hardware.
	1 EA. R10-11	"NO TURN ON RED", (24" x 30") most arm mounted sign with hardware.
	6 EA. R3-5 (R)	"RIGHT TURN ONLY", (30" x 36") two- most arm mounted signs with hardware four- ground mounted signs with hardware.
	1 EA. R3-6 (L)	"LEFT & THRU", (30" x 36") most arm mounted sign with hardware.
	1 EA. R3-5 (1)	"THRU ONLY", (30" x 36") most arm mounted sign with hardware.
	1 EA. S1-11	"PEDESTRIAN X'ING" (30" x 30") symbol ground mounted sign with hardware.
		Shield assembly signs:
		(48" x 75") pole mounted with hardware.
	2 EA.	"NORTH, MD 210, RIGHT ARROW"
	2 EA.	"SOUTH, MD 210, RIGHT ARROW"
		(36" x 51") pole mounted with hardware.
	2 EA.	"NORTH, MD 210, LEFT ARROW"
	1 EA.	"SOUTH, MD 210, LEFT ARROW"
9090	38 S.F.	Flat sheet aluminum sign (green) consisting of:
	2 EA. D3-2	"Audrey LN", dual faced sign, most arm mounted (variable x 16")
	2 EA. D3-2	"ARROW Livingston RD/ Livingston RD ARROW" dual faced sign, most arm mounted (variable x 16").

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR.

<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
1001	2 EA.	Maintenance of traffic.
2003	28 C.Y.	Class 2 Excavation.
2004	7 C.Y.	Test pit excavation.
5004	1060 L.F.	12" white heat applied permanent preformed thermoplastic pavement markings.
5005	320 L.F.	24" white heat applied permanent preformed thermoplastic pavement markings.
5008	450 L.F.	Removal of existing pavement markings.
6001	110 L.F.	Furnish and install depressed curb and gutter.
6003	30 L.F.	Monolithic concrete median 4 feet (Type A-1)
6004	1250 S.F.	4 inch concrete sidewalk.
8004	1 EA.	Cut, clean and cap traffic structure.
8005	2 EA.	Delivery of the controller and cabinet to SHA.
8009	16 EA.	Furnish and install 12" pedestrian signal head section.
8010	87 EA.	Furnish and install 12" signal head section.
8013	3 EA.	Furnish and install 250 watt HPS luminaire with photocell.
8015	1 EA.	Furnish and install 3M opticom • 760 card rack.
8016	1 EA.	Furnish and install 3M opticom • 762 discrim module.
8017	1 EA.	Furnish and install 3M opticom eye • 721.
8019	4 EA.	Furnish and install breakaway ped pole.
8022	2 EA.	Furnish and install mast arm pole and 60' mast arm, (Note: four - 2" x 90").
8023	2 EA.	Furnish and install mast arm pole and 70' mast arm, (Note: four - 2" x 90").
8024	2 EA.	Furnish and install mast arm pole and twin 50/70 mast arm (Note: four - 2" x 90"). Side road is the 70' arm.
8037	1 EA.	Remove and dispose material and equipment per assignment.
8038	10 EA.	Remove and dispose foundation 12" below grade.
8039	2 EA.	Remove existing controller, cabinet and galv. structure.
8040	30 L.F.	Furnish and install 1" galvanized conduit riser.
8042	65 L.F.	Furnish and install 2" polyvinyl chloride electrical conduit (Schedule 80) trenchled.
8044	210 L.F.	Furnish and install 3" polyvinyl chloride electrical conduit (Schedule 80) trenchled.
8046	110 L.F.	Furnish and install 4" polyvinyl chloride electrical conduit (Schedule 80) trenchled.
8047	100 L.F.	Furnish and install 4-conductor opticom cable.
8048	480 L.F.	Furnish and install electrical cable 2-conductor NO. 12 TC.

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<u>ITEM NO.</u>	<u>QUANTITY</u>	<u>DESCRIPTION</u>
8049	35 C.Y.	Furnish and install concrete foundation.
8050	30 L.F.	Furnish and install wood post (4" x 4").
8051	36 L.F.	Furnish and install wood post (4" x 6").
8052	1035 L.F.	Furnish and install No. 6 A.W.G. stranded bare copper ground wire.
8053	66 L.F.	Furnish and install 1" electrical conduit galvanized sleeve.
8056	907 L.F.	Furnish and install 4" polyvinyl chloride electrical conduit (Schedule 80) bored.
8060	33 L.F..	Furnish and install 1" liquid tight flexible non-metallic conduit for detector sleeve.
8061	100 L.F.	Furnish and install electrical cable 1 conductor No.4 A.W.G. - THHN/THWN.
8063	11 EA.	Furnish and install electrical handhole.
8065	22.5 S.F.	Install ground mounted sign.
8066	327.5 S.F.	Install overhead mounted sign.
8067	1900 L.F.	Furnish and install 12 pair communication cable (overhead) self-supporting.
9071	12 EA.	Furnish and install ground rod $\frac{3}{4}$ " dia x 10' length.
9072	2 EA.	Furnish and install control and distribution equipment (120/240 v, 1 phase-3 wire system).
9073	1710 L.F.	Furnish and install electrical cable 2-conductor (aluminum shielded).
9074	950 L.F.	Furnish and install electrical cable 2- conductor (No. 14 AWG).
9075	1470 L.F.	Furnish and install electrical cable 3-conductor (No. 14 AWG).
9076	3880 L.F.	Furnish and install electrical cable 5- conductor ₃ (No. 14 AWG).
9077	2820 L.F.	Furnish and install electrical cable 7-conductor (No. 14 AWG).
8078.	1414 L.F.	Furnish and install loop wire encased in flexible tubing (No. 14 A.W.G.).
8079.	410 L.F.	Furnish and install sawcut for signal loop detector.
8084	2 EA.	Install controller and cabinet - base mounted.
NEG.	3 EA.	Furnish and install 20' lighting arm.
NEG.	6 EA.	Furnish and install pushbutton and education sign.
NEG.	20 S.F.	Remove and install existing signs on new wood post.

GENERAL INFORMATION SHEET 2



MARYLAND DOT - STATE HIGHWAY ADMINISTRATION

Office of Traffic & Safety

TRAFFIC ENGINEERING DESIGN DIVISION
MD 210 (INDIAN HEAD HWY.) FROM
LIVINGSTON RD. TO AUDREY LANE

DRAWN BY: MILES KY	COUNTY: PRINCE GEORGE'S	TS NO. GI-2	SHEET NO. 5 5 OF
CHECK BY: RRZ	LOG MILE: 13.97 TO 14.31		
DATE: 05/26/00	F.A.P. NO.	T.I.M.S. NO.	
SCALE: N/A	S.H.A. NO. XX1005885	D396	